

1116-S1-1747      **Karl RB Schmitt\*** ([karl.schmitt@valpo.edu](mailto:karl.schmitt@valpo.edu)). *Tips, Tools, and Resources for Teaching an Active-Learning motivated Differential Equations Course.*

Have you thought about incorporating active learning or transitioning to an Inquiry-Based Learning (IBL) format, but are hesitant to reinvent the wheel in your Differential Equations course? Would you like to hear about someone else's successes and failures to help you weigh the pros and cons? If you said yes to the above statements and are interested in either IBL resources or stand-alone activities that you can drop into a course to increase student engagement and learning, then you should find this talk beneficial.

During this talk I will describe my experiences teaching an active learning motivated Differential Equations course (not in a traditional IBL style), and more importantly, the resources I used and outcome of the course. The course was loosely based on an IBL text, and supplemented by an array of other materials. These resources will be discussed and include several (free) textbooks, computational labs, modeling mini-projects, and interactive Sage computations. I have taken a critical look at what worked, what didn't and a bit of why. Also included will be open pedagogical questions and general reflections. When I am finished you will have a toolbox of things to try, with concrete suggestions about how to use them in a course, and how to evaluate their impact. (Received September 21, 2015)